attached drawings. Upon indication of permission by the Examiner, Applicant will submit corrected drawings.

SPECIFICATION:

In the following paragraphs of the specification, the term "Working Example(s)" is changed to "Sample(s)." The term "Comparative Example(s)" is changed to "Comparative Sample(s)." The term "Example(s)" is changed to "Sample(s)."

[0031] FIG. 1 is a table showing the values of the parameters employed in the ~~Working Example~~Samples and ~~Comparative Example~~Comparative Samples, along with evaluations from various tests and overall evaluations.

[0032] FIG. 2 is a table showing the values of the parameters employed in the ~~Working Example~~Samples, along with evaluations from various tests and overall evaluations.

[0033] Here follows a description of the meritorious effects of the present invention made with reference to FIG. 1 and FIG. 2. In the following, ~~Working Example~~Samples 1-11 are ~~modes~~ tapes wherein the present invention is adopted, with FIG. 1 and FIG. 2 illustrating the correspondence between the various ~~Working Example~~Samples and the values of the parameters employed in the present invention. In addition, the ~~Comparative Example~~Comparative Samples are ~~modes~~ tapes wherein the present invention is not adopted. Moreover, ~~Working Example~~Samples 1-7 and ~~Comparative Example~~Comparative Samples 1 and 2 adopt a uniform 1.0 parts by weight as the amount of needle-shaped particles and spherical particles. The values of the other parameters are presented in FIG. 1 and FIG. 2.

[0034] The adhesive coating used in the tests had the following composition:

a. Needle-shaped or spherical particles: 1.0 parts by weight (~~Working Example~~Samples 1-7 and ~~Comparative Example~~Comparative Samples 1 and 2)

b. Emulsion-type acrylic adhesive: 37.0 parts by weight (parts by weight when converted to solids)

c. Rosin-based tackifier: 4.5 parts by weight (parts by weight when converted to solids)
d. Phthalocyanine Blue colorant: 1.5 parts by weight
e. Cissing preventative agent: 2.5 parts by weight
f. Water: 53.5 parts by weight

[0035] Note that in ~~Working Example~~Samples 8-11, only the parts by weight of the needle-shaped or spherical particles was varied as illustrated in FIG. 2, while the other constituent ingredients were kept as the same parts by weight in the formula above.

[0037] At the time of manufacture of the transfer tape, a 25 μm polyethylene terephthalate film (band-shaped ribbon) treated with mold-release agent on both sides was coated with an adhesive film according to the various ~~examples~~ Samples described above using a kiss coater to achieve various coating depths. The appearance of the coated surface was evaluated at that time, using the following scale:

5: Absolutely no problems from an appearance standpoint.
4: Nearly no problems from an appearance standpoint.
3: A small amount of cosmetic streaking (but no problems in use).
2: A noticeable amount of cosmetic streaking (but no problems in use).
1: Marked streaking thought to be due to needle-shaped or spherical particles becoming caught on the Meyer bar of the kiss coater occurred, also causing problems in use.

(Ease of Cutting: Test A)

[0038] A transfer tool with a width of 8.4 mm was used to transfer 10 cm of the adhesive film to high-quality paper (the targeted object) and then the transfer tool was moved in the direction of operation of the transfer tool as is while being lifted at an angle of 30° with respect to the targeted object to cut the adhesive film. This test was performed 10 times on each of the ~~examples~~Samples, and the number of times stringiness occurred was evaluated using the following scale:

5: Stringiness did not occur.
4: Stringiness of less than 1 mm occurred 1-2 times.

3: Stringiness of less than 1 mm occurred 3-4 times.

2: Stringiness of 1 mm or more occurred 1-3 times.

1: Stringiness of 1 mm or more occurred 4 or more times.

(Ease of Cutting: Test B)

[0039] A transfer tool with a width of 8.4 mm was used to transfer 10 cm of the adhesive film to high-quality paper (the target object) and then the transfer tool was lifted as is at an angle of 90° with respect to the target object to cut the adhesive film. This test was performed 10 times on each of the ~~examples~~Samples, and the number of times stringiness occurred was evaluated , using the following scale:

5: Stringiness did not occur.

4: Stringiness of less than 1 mm occurred 1-2 times.

3: Stringiness of less than 1 mm occurred 3-4 times.

2: Stringiness of 1 mm or more occurred 1-3 times.

1: Stringiness of 1 mm or more occurred 4 or more times.

(Adhesive Strength)

[0041] FIG. 1 presents a comparison of ~~Working Example~~Samples 1-6, wherein the adhesive film contains the needle-shaped particles at between about 1.0 wt.% and about 3.0 wt.% in the constituent ingredients of the adhesive film, while varying the maximum grain diameters between about 5 μm and about 30 μm and the grain lengths between about 30 μm and 500 μm, against ~~Comparative Example~~Comparative Samples 1 and 2, while illustrating the results of evaluation (with Test A for ease of cutting) and the correspondence with the values of the parameters employed in the present invention. Note that the overall evaluation is indicated by the symbols ◎, ○, △ and × in order from best to worst, where the numbers in parentheses indicate the totals of the scale numbers given above. In addition, on the parameter rows, wherein: parameter 1 denotes the adhesive film contains needle-shaped particles; parameter 2 denotes that the Mohs hardness of the needle-shaped particles is 6 or greater; parameter 3 denotes that maximum grain diameter of the needle-shaped particles is 5-30 μm and their grain length is 30-500 μm; and parameter 4 denotes that the needle-shaped particle content

is 1.0-3.0 wt.%, ○ indicates that ~~an~~a ~~Example~~ Sample employs the parameter for parameter 1 or that the value falls within the stipulated parameter range for each of parameters 2, 3 and 4, △ indicates that the value falls within the stipulated range, but the value is closer to the upper or lower limit of the parameter than the center of the range, while × indicates no employment of parameter 1 or that the value falls outside the stipulated range for each of parameters 2, 3 and 4.

[0042] Here follows a description of the results of various ~~Examples~~ Samples in FIG. 1 along with the reasons.

[0043] ~~Comparative Example~~Comparative Sample 1 had an overall evaluation of × (11). The reason why is because the particles were spherical in shape, the evaluation of ease of cutting Test A was poor.

[0044] ~~Comparative Example~~Comparative Sample 2 had an overall evaluation of × (9). The reason why is because the thickness of coating the adhesive film was made thinner than in ~~Comparative Example~~Comparative Sample 1, so the evaluation of ease of cutting Test A was improved over that of ~~Comparative Example~~Comparative Sample 1, but the evaluation of adhesive strength was worse.

[0045] ~~Working Example~~Sample 1 had an overall evaluation of △ (12). The reason why is because wollastonite with a Mohs hardness of 4.5 was used for the needle-shaped particles, and the maximum grain size and particle length of the needle-shaped particles (hereinafter called the "particle dimensions") was outside the lower limits, so the evaluation of ease of cutting Test A was low. However, needle-shaped particles were used, so the results were better overall than those of ~~Comparative Example~~Comparative Samples 1 and 2.

[0046] ~~Working Example~~Sample 2 had an overall evaluation of ○ (13) so the results were better than those of ~~Working Example~~Sample 1. The reason why is because, although the Mohs hardness was outside the lower limit, the particle dimensions were the lower limit values within the range, so the evaluation of ease of cutting Test A was improved. In addition, needle-shaped particles were used, so the results were better overall than those of ~~Comparative Example~~Comparative Samples 1 and 2.

[0047] ~~Working Example~~Samples 3 and 4 had overall evaluations of ◎ (14) so the results were the best of all of the ~~examples~~ Samples shown in FIG. 1. The reason why is because, although the Mohs hardness was outside the lower limit, the particle dimensions were within the range, so the evaluation of ease of cutting Test A was improved.

[0048] ~~Working Example~~Sample 5 had an overall evaluation of ○ (13) so the results were slightly worse than those of ~~Working Example~~Samples 3 and 4. The reason why is because the particle dimensions were values near the upper limits within the range, so the evaluation of ease of coating was slightly lower in comparison to ~~Working Example~~Samples 3 and 4. In addition, needle-shaped particles were used, so the results were better overall than those of ~~Comparative Example~~Comparative Samples 1 and 2.

[0049] ~~Working Example~~Sample 6 had an overall evaluation of △ (12) so the results were slightly worse than those of ~~Working Example~~Samples 3 and 4. The reason why is because the particle dimensions exceeded the upper limits, so the evaluation of ease of coating was lower in comparison to ~~Working Example~~Samples 3 and 4. In addition, needle-shaped particles were used, so the results were better overall than those of ~~Comparative Example~~Comparative Samples 1 and 2.

[0050] An overall summary of the various ~~Examples~~ Samples presented in FIG. 1 was given above, where ~~Working Example~~Samples 1-6 which contained needle-shaped particles gave results that were better overall than those of ~~Comparative Example~~Comparative Samples 1 and 2 which did not adopt the present invention at all. Moreover, in ~~Working Example~~Samples 1-6, it was found that the overall evaluation was increased when the maximum grain diameter of the needle-shaped particles is 5-30 μm and the grain length of the particles is 30-500 μm.

[0051] FIG. 2 presents the results of evaluation (with Test B for ease of cutting) of ~~Working Example~~Sample 4 which had the best overall results in FIG. 1 and ~~Working Example~~Samples 7-11 wherein the adhesive film contains the needle-shaped particles whose Mohs harness was 6 or greater, maximum grain diameters were between about

5 μm and about 30 μm, and grain lengths were between about 30 μm and 500 μm, while varying their content ratio at between about 1.0 wt.% and about 3.0 wt.% in the constituent ingredients of the adhesive film. Accordingly, in ~~Working Example~~Samples 8-11 among ~~Working Example~~Samples 7-11, the amount of needle-shaped particles was varied to the values of 0.3, 0.5, 1.4 and 1.7 parts by weight, thus varying the content ratio. Note that the overall evaluation is indicated by the symbols ◎, ○, △ and × in order from best to worst, where the numbers in parentheses indicate the totals of the scale numbers given above. The parameter rows show the evaluation results of the ~~Examples~~ Samples evaluated, using the same evaluation methods used in FIG. 1.

[0052] Here follows a description of the results of various ~~Examples~~ Samples in FIG. 2 along with the reasons.

[0053] ~~Working Example~~Sample 4 had an overall evaluation of △ (12). The reason why is because the Mohs hardness was outside the lower limit, so the evaluation of ease of cutting Test B was poor. Note that in the following, the evaluation of relative superiority is indicated based on ~~Working Example~~Sample 4 in FIG. 2 as the reference, but all exhibited results better than ~~Comparative Example~~Comparative Samples 1 and 2 shown in FIG. 1.

[0054] ~~Working Example~~Sample 7 had an overall evaluation of ◎ (15) so the results were the best of all of the ~~examples~~ Samples shown in FIG. 1 or FIG 2. The reason why is because the requirement of a Mohs hardness of 6 or greater was satisfied, so the evaluation of ease of cutting Test B was improved in comparison to ~~Working Example~~Sample 4, and also all of the stipulations of the present invention were satisfied.

[0055] ~~Working Example~~Sample 8 had an overall evaluation of ○ (13) so the results were worse than those of ~~Working Example~~Sample 7 but better than those of ~~Working Example~~Sample 4. The reason why is because the particle content ratio was outside the lower limit, so the evaluation of ease of cutting Test B was low.

[0056] ~~Working Example~~Sample 9 had an overall evaluation of ◎ (14) so the results were slightly worse than those of ~~Working Example~~Sample 7 but better than those of

~~Working Example~~Sample 8. The reason why is because the particle content ratio was at the lower limit within the range, so the evaluation of ease of cutting Test B was improved over that of ~~Working Example~~Sample 8.

[0057] ~~Working Example~~Sample 10 had an overall evaluation of ◎ (14) so the results were slightly worse than those of ~~Working Example~~Sample 7 but roughly the same as those of ~~Working Example~~Sample 9. The reason why is because the particle content ratio was at the upper limit within the range, so the evaluation of ease of cutting Test B was improved over that of ~~Working Example~~Sample 9 but the adhesive strength was lower than that of ~~Working Example~~Sample 9.

[0058] ~~Working Example~~Sample 11 had an overall evaluation of ○ (13) so the results were worse than those of ~~Working Example~~Sample 7 but better than those of ~~Working Example~~Sample 4. The reason why is because the particle content ratio exceeded the upper limit, so the adhesive strength was low.

[0059] An overall summary of the various ~~Examples~~ Samples presented in FIG. 2 was given above, where ~~Working Example~~Samples 7-11, wherein the adhesive film contained the needle-shaped particles whose Mohs harness was 6 or greater, maximum grain diameters were between about 5 μm and about 30 μm, and grain lengths were between about 30 μm and 500 μm, while varying their content ratio at between about 1.0 wt.% and about 3.0 wt.% in the constituent ingredients of the adhesive film, gave results that were better overall than those of ~~Working Example~~Sample 4 , wherein the Mohs hardness of the contained particles was less than 6. ~~Working Example~~Samples 7-11, in which a Mohs hardness of 6 or greater were used, exhibited geed results regarding the ease of cutting. Also, ~~Working Example~~Samples 7, 9 and 10 exhibited good results compared against ~~Working Example~~Samples 8 and 11 because ~~Working Example~~Samples 7, 9 and 10 contained the needle-shaped particles at a content ratio of 1.0-3.0 wt.%, particularly.